

**JONES COUNTY, NORTH CAROLINA
ORDINANCE REGULATING THE CONSTRUCTION, OPERATION
AND MAINTENANCE OF SOLAR ENERGY FACILITIES**

**SECTION I
STATEMENT OF CONSISTENCY**

The proposed Ordinance is found to be consistent with Jones County's Land Use Plan, and other land use regulations, ordinances and policies; and otherwise promotes the public health, safety and general welfare. Therefore, the Ordinance is hereby adopted as set forth here.

**SECTION II
TITLE AND PURPOSE**

A. Title.

This Ordinance may be known and may be cited as "Ordinance Regulating the Construction, Operation and Maintenance of Solar Energy Facilities."

B. Purposes and objectives.

The purposes and objectives for which this Ordinance is passed are as follows:

1. To preserve the dignity and aesthetic quality of the environment in Jones County.
2. To preserve the physical integrity of land in close proximity to residential areas
3. To protect and enhance the economic viability and interests of the citizens and residents of Jones County who have made substantial financial investments in homes and businesses in Jones County.

**SECTION III
DEFINITIONS**

For the purpose of this Ordinance, certain terms and words are hereby defined; words used in the present tense shall include the future; words used in the singular number shall include the plural number; and the plural the singular; and the word "shall" is mandatory and not discretionary.

“Building” Any structure having a roof supported by columns or walls, and designated or intended for the shelter, support, enclosure or protection of persons, animals or chattels.

“Fence” A continuous barrier extending from the surface of the ground to a uniform height of not less than six feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength.

“Gate” A door or other device attached to a fence which, when opened, provides a means of ingress and egress of persons and things for which it was intended, and which, when closed, forms a continuous barrier as a part of the fence to which it is attached.

“Improved Area” Area containing solar panels, electrical inverters, storage buildings and access roads.

“Photovoltaic” A material or device in which electricity is generated as a result of exposure to light.

“Public Road” Any road or highway which is now or hereafter designated and maintained by the North Carolina Department of Transportation as part of the State Highway System, whether primary or secondary, hard-surfaced or other dependable roads. Setbacks for improved areas shall be measured from the road right of way.

“Residence” A building used as a dwelling for one or more families or persons.

“Solar Energy Facility” An energy facility or area of land principally used to convert solar energy to electricity, which includes, but is not limited to, the use of one or more solar energy systems. This definition shall exclude those facilities that are installed on the roof of a building, the primary purpose of such building not being for the commercial production of solar energy and those facilities that contain an Improved Area less than or equal to 10 acres in the aggregate.

SECTION IV **PROHIBITION**

It shall be unlawful after the effective date of this Ordinance for any person, firm, or corporation, or other legal entity to operate, maintain or establish in any unincorporated area of Jones County a Solar Energy Facility which the site plan has not been approved by the Jones County Planning Board. Modifications to an existing Solar Energy Facility that increases the area by more than 20% of the original footprint or changes the solar panel type shall be subject to this Ordinance.

SECTION V **LOCATION**

The following provisions shall apply to the location of all Solar Energy Facilities and Improvement Areas:

- A. Improved areas shall not be located in a federally designated Special Flood Hazard Area.
- B. All site plans for Solar Energy Facilities located in areas covered by the most recent AICUZ report or subsequent reports must be sent to the North Carolina Department of Military and Veterans Affairs and the North Carolina Commanders’ Council for comment within 21 days from the date the site plans are sent.
- C. All Improved Areas shall be at least 100 feet from a public road and 25 feet from the fence line.

- D. Improved Areas shall be at least 100 feet from any contiguous property line not associated with a Solar Energy Facility.
- E. All access roads and storage areas shall be established on a 30-foot minimum easement to a public right-of-way.
- F. All Solar Energy Facilities shall have a minimum landscape buffer containing evergreen vegetation screening where existing buffers do not obscure solar energy system perimeters from dwelling units on adjacent parcels. At maturity required vegetative screening shall not be less than 15 feet tall regardless of line of sight.

An optional earthen berm may be used in conjunction with planted vegetation provided all of the following are met:

1. The combined height of the berm and planted vegetation shall be at least 15 feet and provide approximately 75% opacity within one year of planting.
2. The slope of the berm shall be stabilized with vegetation and no steeper than 3:1.
3. The height of the berm shall be a minimum of 6 feet, with a level or rounded area on top of the berm.
4. The berm shall be constructed of compacted earth.
5. When berms are planned to be installed within required buffers, storm drainage plans submitted with an application shall be designed to anticipate a 100-year storm event.
6. When visible from an adjoining residential use (including across a street) the berm shall be composed of view-obscuring vegetation in combination with a berm designed to obscure views to a height of 15 feet from the ground, except for mechanical equipment which shall be screened to the height of the equipment plus six inches.

Prior to issuance of the first certificate of compliance, berms shall be planted to ensure coverage by live plant material within 3 to 5 years.

SECTION VI

ENCLOSURE FENCING AND SECURITY

Solar energy facilities shall be fenced completely by a continuous barrier extending from the surface of the ground to a uniform height of not less than 6 feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength. The perimeter fence shall be designed to restrict unauthorized access.

SECTION VII

SUPPLEMENTAL REGULATIONS

- A. The manufacturers or installer's identification and appropriate warning sign shall be posted on or near the panels in a clearly visible manner.
- B. On site power lines between solar panels and inverters shall be placed underground.
- C. The design of Solar Energy Facilities buffers shall use materials, colors, textures, screening and landscaping, that will blend the facility into the natural setting and existing environment.
- D. If the Solar Energy Facility consists of batteries or storage of batteries, adequate design must be provided to ensure all local, state and federal requirements regulating outdoor battery storage have been met.
- E. The applicant must obtain from NC Department of Transportation a driveway permit.
- F. The design and construction of Solar Energy Facilities shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and/or traffic control operations as stated in the most recent AICUZ report, as well as low level military training routes as then utilized by any branch of the US Department of Defense.
- G. The design and construction of Solar Energy Facilities shall not produce electrical emissions that would interfere with aircraft communications systems or navigation equipment as stated in the most recent AICUZ report, as well as low level military training routes as then utilized by any branch of the US Department of Defense.
- H. A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the county.
- I. An affidavit or evidence of an agreement between the lot owner and the facility's owner or operator confirming the owner or operator has permission of the property owner to apply for the necessary permits for construction and operation of the Solar Energy Facility.
- J. Any other relevant studies, reports, certificates and approval as may be reasonably required by Jones County.

- K. A description of the proposed technology to include type of solar panel and system, fixed mounted verses solar tracking, number of panels, and angles of orientation.
- L. An information sign shall be posted and maintained at the entrance(s) which lists the name and phone number of the operator.
- M. It is the responsibility of the parcel owner to remove all obsolete or unused systems within 12 months of cessation of operations. Reusable components are to be recycled whenever possible.
- N. A copy of all permits and/or approvals issued by the North Carolina Utilities Commission.
- O. Each owner, operator or maintainer of a Solar Energy Facility to which this Ordinance applies shall utilize good husbandry techniques with respect to said vegetation, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of landscaping shall be maintained by the facility operator not to exceed 12 inches in height.

SECTION VIII

SITE PLAN REQUIRED

- A. Owners or operators of Solar Energy Facilities established after the effective date of this Ordinance shall present 3 copies of a site plan, which conform to the standards of this Ordinance to the Planning Board. The site plan shall include setbacks, panel sizes, and location of property lines, buildings and road rights-of-way.
- B. The Planning Board shall review the site plan to insure conformity with the requirements of this Ordinance. No new Solar Energy Facility shall be operated until the site plan has been approved by the Planning Board; provided, however, that if the Planning Board has not taken action within 90 days after the first Planning Board meeting after the submission of the site plan, said site plan will be deemed to be approved.
- C. Planning Board may recommend to the Board of Commissioners that a variance be granted from these regulations, and the Board of Commissioner may grant such a variance, when, in each Board's opinion, undue hardship may result from strict compliance. In recommending or granting any variance, both Boards shall make the findings required below, taking into account the nature of the proposed subdivision, the existing use of land in the vicinity, the number of persons to reside or work in the vicinity of the Solar Energy Facility, and the probable effect of the Solar Energy Facility upon traffic conditions in the vicinity. No variance shall be granted unless both Boards find:
 - 1. That there are special topographical or environmental circumstances or conditions affecting said property such that the strict application of the provisions of this ordinance would deprive the applicant of the reasonable use of his land; and

2. That the granting of the variance will not be detrimental to the purpose of this ordinance, public health, safety and welfare or injurious to other property in the territory in which said property is situated.

In recommending or granting variances, the relevant Board may require such conditions as will secure, insofar as practicable, the objectives or requirements varied. Any variance thus recommended is required to be entered in writing in the minutes of the appropriate Board and the reasoning upon which departure was justified set forth.

- D. Prior to final inspection, proof must be submitted that a permit has been issued in accordance with applicable provisions of the General Statutes by the State of North Carolina.
- E. Appeals of all matters under this Ordinance shall be to the Board of Commissioners.

SECTION IX

ABANDONMENT AND DECOMMISSIONING PLAN

A. Abandonment

1. A Solar Energy Facility that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current responsible party (or parties) with ownership interest in the Solar Energy Facility provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Chief Building Inspector or his designee of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and restore the parcel to its condition prior to development of the Solar Energy Facility.
2. Upon determination of abandonment, the Chief Building Inspector shall notify the party (or parties) responsible they must remove the Solar Energy Facility and restore the site to its condition prior to development of the Solar Energy Facility within 360 days' of notice by the Chief Building Inspector or his designee.
3. If the responsible party (or parties) fails to comply, the Chief Building Inspector or his designee may remove the Solar Energy Facility, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the Solar Energy Facility and restore the site to a non-hazardous pre-development condition.

B. Decommissioning

1. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) addressing the following shall be submitted prior to the issuance of the development permit:
 - a. Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, abandonment etc.)
 - b. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations.
 - c. Restoration of property to condition prior to development of the Solar Energy Facility.
 - d. The timeframe for completion of decommissioning activities.
 - e. Description of any agreement (e.g. lease) with landowner regarding decommissioning.
 - f. The party currently responsible for decommissioning.
 - g. Plans for updating this decommissioning plan.
 - h. A form of surety equal to 125% of the entire cost of decommission under the plan, as estimated by a North Carolina licensed engineer under seal, and approved by the County Chief Building Inspector and County Attorney, either through cash, a surety performance bond, irrevocable letter of credit or other instrument readily convertible into cash at face value, either with the County or in escrow with a financial institution designated as an official depository of the County. This surety shall be retained by the County to cover the cost of the decommissioning requirements herein. Following initial submittal of the surety, the cost calculation shall be reviewed annually, and adjusted accordingly based upon an updated estimate of a North Carolina licensed engineer under seal, of the estimated decommissioning costs; provided however, any such periodic adjustment must be approved by the Planning Board. Failure to comply with any requirement of this paragraph shall result in the immediate termination and revocation of all prior approvals and permits; further, County shall be entitled to make immediate demand upon, and/or retain any proceeds of, the surety, which shall be used for decommissioning and/or removal of the Solar Energy Facility, even if still operational.

SECTION X

AVIATION NOTIFICATION

- A. For consideration of potential impacts to Cherry Point MCAS and MCAS New River flying operations, notification of intent to construct an Solar Energy Facility shall be sent to the respective Base Commanders or designated officials 30 days before the regularly scheduled Planning Board meeting. Notification shall include location of Solar Energy Facility (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of notification and date of delivery shall be submitted with permit application.
- B. For consideration of potential impacts to civilian flight paths for airport operations located within 5 nautical miles from an airport listed in the National Plan of Integrated Airport

Systems, notification of intent to construct a Solar Energy Facility shall be sent to the airport manager or designated official and the Federal Aviation Administration's (FAA) Airport District office (ADO) with oversight of North Carolina. Notification shall include location of the Solar Energy Facility (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of notification and date of delivery shall be submitted with permit application. The airport must be given 30 days for review.

- C. For consideration of potential impacts to civilian flight paths for airport operations located within 5 nautical miles from an airport not listed in the National Plan of Integrated Airport Systems, except military airports, notification of intent to construct a Solar Energy Facility shall be sent to the airport manager or designated official. Notification shall include location of Solar Energy Facility (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of notification and date of delivery shall be submitted with permit application. The airport must be given 30 days for review.
- D. After receiving notification of intent to construct a Solar Energy Facility as described in this Ordinance; if requested, the proponent of the Solar Energy Facility shall use the latest version of the Solar Glare Hazard Analysis Tool (SGHAT), per its user's manual to evaluate the solar glare aviation hazard, as indicated below:
 - 1. Airport operations at an airport in the National Plan of Integrated Airport Systems (NPIAS) within 5 nautical miles of the center of a proposed Solar Energy Facility: provide required SGHAT analysis information to the airport manager or designated official and the Federal Aviation Administration's (FAA) Airport District office (ADO) with oversight of North Carolina.
 - 2. Airport operations at airport *not* in the NPIAS, except military airports, within 5 nautical miles of the center of proposed Solar Energy Facility: provide required SGHAT analysis information to the management of the airport for non-military airports.

The full report for each flight path and observation point, as well as the contact information for the zoning administrator, shall be sent to the authority indicated below at least 30 days prior to site plan approval. Proof of delivery of notification and date of delivery shall be submitted with permit application.

- E. Proposed Solar Energy Facilities within the Cherry Point MCAS and MCAS New River Airspace Control Surfaces Areas as defined in the most recent Air Installation Compatible Use Zones (AICUZ) or subsequent AICUZ reports will be evaluated for potential impacts to Cherry Point MCAS and MCAS New River flying operations as described below.
 - 1. After receiving notification of intent to construct a Solar Energy Facility as described in this section (to include all SGHAT PV parameters), the Cherry Point MCAS and

MCAS New River Base Commanders or their designated officials will notify the designated Jones County official if the SGHAT needs to be utilized by the Solar Energy Facility proponent or not.

2. If the SGHAT does not need to be utilized, the Cherry Point MCAS and MCAS New River Base Commanders or designated officials will respond to the designated Jones County official.
 3. If the SGHAT does need to be utilized, the Solar Energy Facility proponent shall contact the Cherry Point and New River Base Commanders or designated officials to receive the military data needed for the SGHAT (e.g., locations, increments, and elevations of observation points, as well as air traffic control tower information). The SGHAT shall be used per its user manual and reports must be run over the entire calendar year (each time zone). Upon receiving the SGHAT reports, the Cherry Point and New River Base Commanders or designated officials will respond to the designated Jones County official.
- F. Any applicable Solar Energy Facility design changes (e.g. module tilt, module reflectivity, etc.) after initial submittal shall be rerun in the SGHAT tool and the new full report shall be sent without undue delay in accordance with the same provisions of this Ordinance as the original report.

SECTION XI

VIOLATION SHALL BE A MISDEMEANOR

- A. Any person, firm, corporation, or other entity who maintains or operates or who controls the maintenance of a Solar Energy Facility in violation of this Ordinance shall be guilty of a misdemeanor and subject to prosecution, and if convicted, shall be punished by a fine not to exceed \$500.00 or by imprisonment not to exceed 30 days, or both, in the discretion of the court. Each day that said Solar Energy Facility shall be maintained or operated in violation of this Ordinance shall constitute a separate and distinct offense.
- B. Any act constituting a violation of the provisions of this Ordinance or a failure to comply with any of its requirements shall subject the offender to a civil penalty of \$500.00. If the offender fails to remedy the violation and pay any civil penalty within 30 days after being cited for said violation (or within the time prescribed by a citation if it provides for a longer period of time than 30 days), the civil penalty may be recovered in a civil action in the nature of a debt. Civil penalties begin to accrue from the date of the first notice of violation. Such civil penalties shall be in addition to the abatement costs assessed pursuant to this Ordinance.
- C. Each day that any violation continues, regardless of the date of notice, shall be considered a separate offense for purposes of the penalties and remedies specified in this section. In such an event, civil penalties begin to accrue from the date of the first notice of violation. For continuing violations, the initial citation and requirement that the civil penalty be paid within the time prescribed therein shall be the only notice required to be given; and shall

be deemed to be an on-going citation and notice for continuing violations after the date of the first notice.

SECTION XII **ENFORCEMENT**

- A. The enforcement officer shall be the Chief Building Inspector or his designee. The enforcement officer shall review site plans submitted under this Ordinance and make appropriate recommendations to the Planning Board. The enforcement officer shall also visit the facilities regulated by this Ordinance as needed in the Chief Building Inspector's discretion, at least annually, and if the facility does not conform to said Ordinance shall discuss with the owner and/or operator the steps needed to bring the facility into compliance. If these steps are not taken, the enforcement officer shall notify the owner in writing of the steps that must be taken to bring the facility into compliance. If the owner or operator still fails to bring the facility into compliance with this Ordinance, the enforcement officer, after consultation with the county manager, shall institute the necessary steps to enforce this Ordinance in accordance with this section. The enforcement officer shall also assist owners or operators of any Solar Energy Facility in making plans to comply with this Ordinance.
- B. This Ordinance may be enforced by an appropriate equitable remedy issuing from a court of competent jurisdiction. It may be enforced by injunction and order of abatement. The County may apply for a mandatory or prohibitory injunction and order of abatement commanding the violator to correct any unlawful condition upon or cease the unlawful use of property. The County may request an order of abatement as part of a judgment in the cause any may request the court to close, demolish or remove buildings or other structures or take any other action that is necessary to bring the Solar Energy Facility into compliance with this Ordinance.
- C. This Ordinance may be enforced by any one or more of the remedies authorized herein.

Adopted and effective this ____ day of _____, 2019.

JONES COUNTY

(County Seal)

W. MICHAEL HADDOCK, Chairman

Attest:

ANGELICA HALL, Clerk